

PhD scholarship, University Jean Monnet, Saint-Etienne, France

A 3-year fully funded PhD scholarship is available at the University Jean Monnet in Saint-Etienne (France) under the supervision of Pr Guillaume MILLET (PhD, Exercise Physiology) and Pr Jean-Philippe CAMDESSANCHÉ (MD-PhD, Neurology).

Applicants should have (or anticipate having) a MSc and strong research background in exercise physiology and neurophysiology. Knowledge in transcranial magnetic stimulation and clinical experience will be valued.

The successful applicant will become part of a unique training and research environment, the ActiFS group within the multidisciplinary Inter-university Laboratory of Human Movement (LIBM).

As PhD student, you will be responsible for:

- Independently carrying out research and completing a PhD dissertation within three years;
- Collecting and analyzing physiological data, including VO₂, actigraphy and neuromuscular function data (EMG, electrical stimulation, transcranial magnetic stimulation);
- Reporting the results in international peer-reviewed scientific journals and conferences.

There are no citizenship restrictions. Speaking French is not mandatory. However, the candidate must be willing to learn French.

Applications should include a cover letter discussing your interest in the position and stating the date when you expect to be available, CV, and the names and contact information of two academic references.

Application deadline: will remain open until filled.

Tentative start date: January 1st, 2019.

PROJECT SUMMARY

This PhD thesis is part of a larger project (ActiFS) that will examine the ability of objective measures of fatigue resistance due to exercise to explain subjective chronic fatigue, the most debilitating still untreated symptom reported by patients. The ActiFS project will also enable the effects of innovative and/or tailored exercise interventions on fatigue to be better understood. This research will ultimately be translated to rehabilitation programs to minimize fatigue in clinical populations, thus enhancing patients' quality of life. ActiFS also aims to reduce the large societal financial costs due to fatigue as, among others, it often delays return to work and reduces productivity.

More specifically, preliminary results from our laboratory have shown a relationship between chronic subjective fatigue and acute resistance to fatigue due to cycling exercise in people with multiple sclerosis (PwMS). When comparing PwMS with high level of fatigue and low level of fatigue, differences were observed not only in corticospinal excitability but also in peripheral fatigue. This project will further investigate the cause of higher peripheral fatigability in fatigued PwMS and examine the effects of a 12-week training intervention that aims to improve objective causes of fatigue (e.g. peripheral fatigability, maximal strength at rest, cardiorespiratory fitness, etc).

All patients will be assessed and trained in St-Etienne at the Regional Institute of Sport Medicine and Engineering located on the Health and Innovation Campus.

CONTACT

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